

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION

Amend the paragraph on page 885, line 19 as follows:

Hybridization probes were generated from isolated mRNA using an AtlasTM Glass Fluorescent Labeling Kit (Clontech Laboratories, Inc., Palo Alto, California, USA). This entails a two step labeling procedure that first incorporates primary aliphatic amino groups during cDNA synthesis and then couples fluorescent dye to the cDNA by reaction with the amino functional groups. Briefly, 5 µg of oligo(dT)₁₈ primer d(TTTTTTTTTTTTTTTTTTV) (SEQ ID NO: 80420) was mixed with Poly A+ mRNA (1.5 - 2 µg mRNA isolated using the Qiagen Oligotex mRNA Spin-Column protocol or the Stratagene Poly(A) Quik mRNA Isolation protocol (Stratagene, La Jolla, California, USA)) in a total volume of 25 µl. The sample was incubated in a thermocycler at 70°C for 5 min, cooled to 48°C and 10 µl of 5X cDNA Synthesis Buffer (kit supplied), 5 µl 10X dNTP mix (dATP, dCTP, dGTP, dTTP and aminoallyl-dUTP; kit supplied), 7.5 µl deionized water and 2.5 µl MMLV Reverse Transcriptase (500U) added. The reaction was then incubated at 48°C for 30 minutes, followed by 1hr incubation at 42°C. At the end of the incubation the reaction was heated to 70°C for 10 min, cooled to 37°C and 0.5 µl (5 U) RNase H added, before incubating for 15 min at 37°C. The solution was vortexed for 1 min

after the addition of 0.5 μ l 0.5 M EDTA and 5 μ l of QuickClean Resin (kit supplied) then centrifuged at 14,000-18,000 X g for 1 min. After removing the supernatant to a 0.45 μ m spin filter (kit supplied), the sample was again centrifuged at 14,000-18,000 X g for 1 min, and 5.5 μ l 3 M sodium acetate and 137.5 μ l of 100% ethanol added to the sample before incubating at -20°C for at least 1 hr. The sample was then centrifuged at 14,000-18,000 X g at 4°C for 20 min, the resulting pellet washed with 500 μ l 70% ethanol, air-dried at room temperature for 10 min and resuspended in 10 μ l of 2X fluorescent labeling buffer (kit provided). 10 μ l each of the fluorescent dyes Cy3 and Cy5 (Amersham Pharmacia (Piscataway, New Jersey, USA); prepared according to AtlasTM kit directions of Clontech) were added and the sample incubated in the dark at room temperature for 30 min.

Amend the paragraph on page 886, line 17 as follows:

Alternatively, 3-4 μ g mRNA, 2.5 (~8.9 ng of in vitro translated mRNA) μ l yeast control and 3 μ g oligo dTV (TTTTTTTTTTTTTTTTTT(A/C/G); SEQ ID NO: 80420) were mixed in a total volume of 24.7 μ l. The sample was incubated in a thermocycler at 70°C for 10 min. before chilling on ice. To this, 8 μ l of 5X first strand buffer (SuperScript II RNase H- Reverse Transcriptase kit

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from Invitrogen (Carlsbad, California 92008); cat no. 18064022), 0.8 °C of aa-dUTP/dNTP mix (50X; 25mM dATP, 25mM dGTP, 25mM dCTP, 15mM dTTP, 10mM aminoallyl-dUTP), 4 µl of 0.1 M DTT and 2.5 µl (500 units) of Superscript R.T.II enzyme (Stratagene) were added. The sample was incubated at 42°C for 2 hours before a mixture of 10 °C of 1M NaOH and 10°C of 0.5 M EDTA were added. After a 15 minute incubation at 65°C, 25 µl of 1 M Tris pH 7.4 was added. This was mixed with 450 µl of water in a Microcon 30 column before centrifugation at 11,000 X g for 12 min. The column was washed twice with 450 µl (centrifugation at 11,000 g, 12 min.) before eluting the sample by inverting the Microcon column and centrifuging at 11,000 X g for 20 seconds. Sample was dehydrated by centrifugation under vacuum and stored at -20°C.

Amend the paragraph on page 891, line 6 as follows:

Reamplification primers

99G24

CGCCAGGGTTTTCCAGTCACGAC|ACGACTCACT|gatgagtcctgagtaa|

M13 forward +10 MseI+0

(SEQ ID NO: 80421)

99G20

AGCGGATAACAATTTACACAGGA|CACACTGGTA|tagactgcgtaccga|

M13 reverse +10 TaqI +0

(SEQ ID NO: 80422)

Amend the paragraph on page 900, line 1 as follows:

AD2: 5' NGTCGASWGANAWGAA 3' (SEQ ID NO: 80423) (128-fold
degeneracy)

S = G or C, W = A or T, and N = A, G, C, or T

LB1: 5' GTTTAACTGCGGCTCAACTGTCT 3' (SEQ ID NO: 80424)

LB2: 5' CCCATAGACCCTTACCGCTTTAGTT 3' (SEQ ID NO: 80425)

LB3: 5' GAAAGAAAAAGAGGTATAACTGGTA 3' (SEQ ID NO: 80426)

IN THE SEQUENCE LISTING

Please insert the Sequence Listing enclosed herewith immediately
after the abstract.